

Fuel Panel

Tank 1,2,3 FILL Switches

Switch opens the respective Fill valve in Manual mode

1st Press:

- In Manual mode, Arms the Fill valve for as long as it is held
- Remains armed after release under these conditions
 - Tank 2 Fill valve remains armed if any Upper Aux tank pump is on
 - Tanks 1/3 valves remain armed if tank 2 > 40,000 lbs

2nd Press

- Disarms the Fill valve

ARM (illuminated)

- Fill valve armed to accept transferred fuel

FILL (illuminated)

- Fill valve open and accepting transferred fuel

XFEED Valve Switch

Opens/closes crossfeed valve in Manual mode

ON

- Valve is commanded open

DISAG

- Valve position does not agree with switch position

Tank 1/3 PUMPS Switch

Turns on/off Fwd/Aft pumps in Manual mode

OFF -In Manual mode, neither pump is commanded on. In Auto mode, pumps are off due to suction feed (low fuel level).

LOW - Low pressure with both pumps commanded on

Tank 2 PUMPS Switch

Turns on/off Fwd, L/R Aft boost pumps in Manual mode

OFF -No boost pumps are commanded on

LOW -Low pressure with all 3 pumps commanded on

Limitation

Maximum lateral fuel imbalance between tanks 1 and 3 is 2,500 lbs

QTY TEST

- Gauges will read 1888880, then 10,500, then return to original amount in tank.
- Totalizer will read 52,400 during test, then total amount in tank

System SELECT / MANUAL Switch

There are two Auto channels. One is active, the other identical channel is standby. In addition, there is a Manual mode. The Switch allows selection between the two Auto channels and the (single) manual mode. With the system operating normally (in Auto mode), pressing the switch will select the Manual mode. Pressing the switch again will select the second Auto channel. The system will continue to alternate in that order with each press of the switch. In addition, if the system detects certain faults, it will automatically revert to Manual mode. This is indicated by SELECT and MANUAL both being illuminated. The system can then be locked in Manual mode by pressing the switch (which extinguishes the SELECT light).

DUMP Switch

Starts/Stops fuel dump sequence

1st Press:

- Dumps appx 5800 ppm down to the FMS entered value

2nd Press:

- Shuts off dumping
- Cancels FMS dump shutoff

3rd Press:

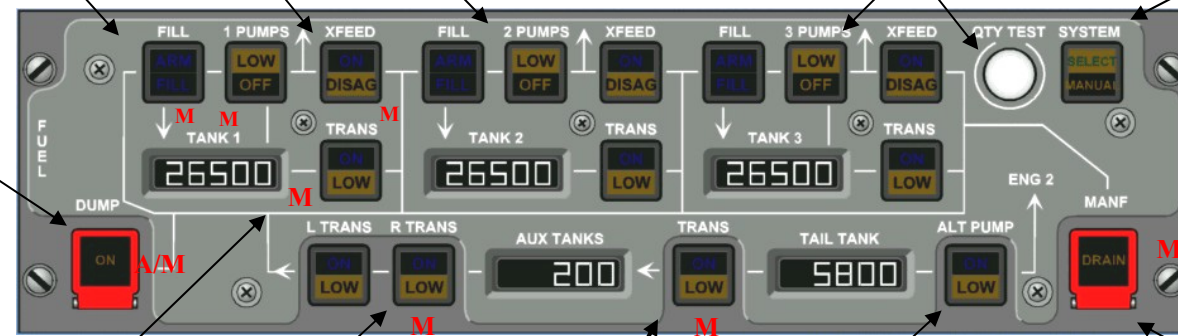
- Dumps to min dump level of 11,500 lbs per main tank

ON (illuminated after pressing switch)

- Dumping sequence:
 - Fill valves and Fill Isolation valves close (except Upper Aux)
 - Upper Aux Fill valve opens
 - Tank pumps turn on (except Tail Alt pump)
 - Transfer pumps turn on
 - Crossfeed valves open
 - L & R Dump valves open

FUEL DUMP DISABLED alert displays if fuel dump fails to stop at the FMS entered value

FUEL DUMP LEVEL alert displays if system fails to shut off at the low level cutoff of 11,500 lbs per main tank (manual stop required)



SELECT and MANUAL (both illuminated)

- System has detected a fault and has automatically switched to Manual mode

MANUAL (illuminated)

- System has been selected to Manual mode by pressing the switch
- Switching to Manual mode turns on tanks 1,2 & 3 boost pumps, and all Aux Transfer and Tail Transfer pumps. Tank 2 transfer and fill valves remain in the position they were in prior to switching to Manual mode.
- Flashes if in Auto mode, and any switch is pressed that will not function in Auto mode.

Tank 1,2,3 TRANS Switches

Switch turns the respective transfer pumps on/off in the Manual mode

ON (illuminated)

- Transfer pumps are commanded on

LOW

- Low pump pressure when pump is commanded on

Aux Tank L/R TRANS Switches

Switch turns the Upper and Lower Aux pumps on/off in the Manual mode

ON (illuminated)

- Transfer pumps are commanded on

LOW

- Aux pumps are commanded on, but indicate low pressure for several minutes

Tail Tank ALT PUMP Switch

Switch turns on the Tail Tank Alt pump in the Manual mode

ON (illuminated)

- Tail Alt pump is commanded on
- Supplies fuel to Eng 2 only

LOW

- Low pump pressure, or tank is empty

DRAIN Switch

Switch functions only when operating system in Manual mode. In Auto mode (normal), the actions performed by pressing this switch are performed automatically

Pressing the DRAIN switch will open the manifold drain/outboard fill valves to allow the manifold fuel to drain into tank two. Although the switch is not functional in auto mode, DRAIN will illuminate on the switch if valves are open for the purpose of draining the manifold regardless of whether the system is in Auto or Manual.

Fuel Capacity

- Tank 2 = 64,000 lbs
- Tank 1 / 3 = 40,500 lbs
- U/L Aux = 98,100 lbs
- Tail = 13,100 lbs
- Total = 256,800 lbs

Tail Tank TRANS Switch

Switch turns on the Tail Tank Transfer pumps in the Manual mode and opens the Upper Aux Fill Valve in order to transfer fuel into the Upper Aux Tank.

ON (illuminated)

- Transfer pumps are commanded on

LOW

- Low pump pressure, or tank is empty

Normal Fuel Scheduling

Lwr Aux feeds Upper Aux. Upper Aux feeds mains 1-2-3. Each main tank then feeds respective engine. When Aux tanks are empty, tank 2 fills tanks 1 & 3 until equal. Fuel is then used equally from each tank. When tanks 1 & 3 decrease below 11,500 lbs, tip tank fuel will transfer inboard.

Tail tank fuel management is normally automatic, and transfers fuel in an attempt to maintain CG 2% forward of the maximum aft CG. Tail fuel management begins when gear and slats are retracted. Tail fuel management ends during descent when passing through 26,750 feet, or when gear and flaps are extended. Tail fuel is then pumped forward. During descent, or when any main tank decreases below 11,500 lbs, tail fuel management ceases and tail fuel is transferred forward